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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,384	09/05/2003	J.Kirk Haselden	MSFT-2555/304784.1	9572
41505 7590 11/01/2007 WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891			EXAMINER PATEL, NIRAV B	
			ART UNIT 2135	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/656,384

Applicant(s)

HASELDEN ET AL.

Examiner

Nirav Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2007 (RCE).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's submission for RCE filed on Aug. 17, 2007 has been entered. Claims 1-26 are pending.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 recites, "An object model document comprising: a compiled executable file for persisting an object model, the file having: an image source...., a security source,....a loader for being instantiated.....". Claim 1 is rejected under 35 USC 101 for failing to provide a practical application that produces a useful, tangible and concrete result. Claim 1 is computer programs claimed as computer listings "per se" that is, the descriptions or expression of programs, are not physical "things". They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not provide a practical application that produces a useful, tangible and concrete result.

Claims 2-9 depend on claim 1, therefore they are rejected with the same rationale applied against claim 1 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 9, 10, 17, 18, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan et al (US Patent No. 6,405,316) and in view of Rothrock et al (US Patent No. 7,181,603).

As per claim 1, Krishnan teaches:

a compiled executable file for persisting an object model having [Fig. 1]: an image source from which the persisted object model is instantiated in a memory of a computer [Fig. 1, col. 6 lines 25-35, col. 7 lines 1-10]; a security source from which a security agent is instantiated in the memory of the computer [Fig. 8A, 8B col. 9 lines 55-56]; and a loader for being instantiated in the memory of the computer [Fig. 1, 8A, 8B, col. 3 lines 1-4]. Further, Krishnan teaches instantiating the security agent in the memory from the security source, and returning to the commander a first reference to the instantiated security agent, whereby the commander in employing the first reference accesses the security agent rather than the instantiated object model [Fig. 6, 8A, col. 8 lines 49-65].

Rothrock teaches:

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a security agent is instantiated in the memory of the computer; the security agent for controlling access to the object model as instantiated in the memory of the computer [Fig. 1 col. 2 lines 47-49, col. 5 lines 30-41, col. 7 lines 26-29], upon a command from a commander to execute the executable file to instantiate the persisted object model, the loader for instantiating the object model in the memory from the image source, instantiating the security agent in the memory from the security source, and returning to the commander a first reference to the instantiated security agent, whereby the commander in employing the first reference accesses the security agent rather than the instantiated object model [Fig. 1, 4, 5 col. 5 lines 30-41, col. 7 lines 19-67]. Further, Rothrock teaches that one or more software modules are loaded into the memory along with the main player executable files [col. 4 lines 30-33].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Rothrock with Krishnan, since one would have been motivated to protect function calls between program modules by redirecting function call through a protected environment to effect secure linkage of program modules [Rothrock, col. 1 lines 9-10, col. 2 lines 16-17].

As per claim 9, the rejection of claim 1 is incorporated and Krishnan discloses:

the loader instantiates the security agent as part of the object model [Fig. 8A, 8B].

As per claim 10, it encompasses limitations that are similar to limitations of claim 1.

Thus, it is rejected with the same rationale applied against claim 1 above.

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As per claim 17, the rejection of claim 10 is incorporated and it encompasses limitations that are similar to limitations of claim 9. Thus, it is rejected with the same rationale applied against claim 9 above.

As per claim 18, it encompasses limitations that are similar to limitations of claim 1. Thus, it is rejected with the same rationale applied against claim 1 above.

As per claim 26, the rejection of claim 18 is incorporated and it encompasses limitations that are similar to limitations of claim 9. Thus, it is rejected with the same rationale applied against claim 9 above.

4. Claims 2-4, 11-12, 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan et al (US Patent No. 6,405,316) in view of Rothrock et al (US Patent No. 7,181,603) and in view of Golan (US Patent No. 5,974,549).

As per claim 2, the rejection of claim 1 is incorporated and Golan discloses:

the executable file is compiled by a compiler from a C-type programming language object model document [col. 9 lines 56-67, col. 10 lines 1-18, Fig. 4].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Golan with Krishnan and Rothrock, since one would have been motivated to monitor the execution of the software component (i.e. object model) and provide the security [Golan, col. 3 lines 35-37].

As per claim 3, the rejection of claim 1 is incorporated and Golan discloses:

the loader upon instantiating the security agent provides same with a second reference to the instantiated object model, whereby the commander does not have the second reference and therefore cannot directly access the object model or command same to act [Fig. 4, col. 7 lines 50-57, Fig. 10].

As per claim 4, the rejection of claim 1 is incorporated and Golan discloses:

the instantiated security agent passes on each command (i.e. API call) from the commander to the object model unless such security agent deems such command to be of a type that should not be so passed on [col. 2 lines 43-47, 67, col. 3 lines 1-3].

As per claim 11, the rejection of claim 10 is incorporated and it encompasses limitations that are similar to limitations of claim 3. Thus, it is rejected with the same rationale applied against claim 3 above.

As per claim 12, the rejection of claim 10 is incorporated and it encompasses limitations that are similar to limitations of claim 4. Thus, it is rejected with the same rationale applied against claim 4 above.

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As per claim 19, the rejection of claim 18 is incorporated and it encompasses limitations that are similar to limitations of claim 2. Thus, it is rejected with the same rationale applied against claim 2 above.

As per claim 20, the rejection of claim 18 is incorporated and it encompasses limitations that are similar to limitations of claim 3. Thus, it is rejected with the same rationale applied against claim 3 above.

As per claim 21, the rejection of claim 18 is incorporated and it encompasses limitations that are similar to limitations of claim 4. Thus, it is rejected with the same rationale applied against claim 4 above.

5. Claims 5, 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan et al (US Patent No. 6,405,316) in view of Rothrock et al (US Patent No. 7,181,603) in view of Golan (US Patent No. 5,974,549) and in view of Seeman (US Pub. No. 2003/0200459).

As per claim 5, the rejection of claim 4 is incorporated and Golan discloses blocking the API calls (i.e. commands) that are forbidden according to the security policy [col. 2 line 67, col. 3 lines 1-3]. Golan doesn't expressively mention that a type of command that would expose the object model in a non-obfuscated form.

Seeman teaches:

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the security agent does not pass on to the object model a type of command that would expose the object model in a non-obfuscated form (i.e. clear form or decrypted form) [paragraph 0022 lines 13-16, paragraph 0165 lines 16-18 determines access/usage rights, if determines that the file may not be accessed, process monitor blocks further file reading i.e. does not perform the decryption process on the protected file/document]. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Seeman with Krishnan, Rothrock and Golan, since one would have been motivated to protecting the digital documents/files [Seeman, paragraph 0019 lines 2-3].

As per claim 13, the rejection of claim 12 is incorporated and it encompasses limitations that are similar to limitations of claim 5. Thus, it is rejected with the same rationale applied against claim 5 above.

As per claim 22, the rejection of claim 21 is incorporated and it encompasses limitations that are similar to limitations of claim 5. Thus, it is rejected with the same rationale applied against claim 5 above.

6. Claims 6, 7, 14, 15, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan et al (US Patent No. 6,405,316) in view of Rothrock et al (US Patent No. 7,181,603) in view of Golan (US Patent No. 5,974,549) and Masaki et al (US Patent No. 6,980,308).

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As per claim 6, the rejection of claim 4 is incorporated and Golan discloses:

blocking the API calls (i.e. commands) by the security monitor that are forbidden according to the security policy [col. 2 line 67, col. 3 lines 1-3].

Masaki teaches:

if the degree of matching with the specified pattern is large (i.e. expose the object with a level of granularity finer than a pre-defined maximum), sends a print inhibition command to the printer driver to stop the transmission of the print data (i.e. does not pass a command) [col. 4 lines 1-5, col. 3 lines 9-13, Fig. 7].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Masaki with Krishnan, Rothrock and Golan, since one would have been motivated to provide the security [Masaki, col. 1 line 13].

As per claim 7, the rejection of claim 6 is incorporated and Golan discloses:

allowing the API calls (i.e. commands) by the security monitor that are permitted according to the security policy [col. 3 lines 3-5].

the pattern detector does not detect a specified pattern (i.e. expose the object with a level of granularity coarser than the pre-defined maximum), sends a print permission command to the printer driver to start the transmission of the print data (i.e. passes a command) [col. 3 lines 1-7, Fig. 7].

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As per claim 14, the rejection of claim 12 is incorporated and it encompasses limitations that are similar to limitations of claim 6. Thus, it is rejected with the same rationale applied against claim 6 above.

As per claim 15, the rejection of claim 14 is incorporated and it encompasses limitations that are similar to limitations of claim 7. Thus, it is rejected with the same rationale applied against claim 7 above.

As per claim 23, the rejection of claim 21 is incorporated and it encompasses limitations that are similar to limitations of claim 6. Thus, it is rejected with the same rationale applied against claim 6 above.

As per claim 24, the rejection of claim 23 is incorporated and it encompasses limitations that are similar to limitations of claim 7. Thus, it is rejected with the same rationale applied against claim 7 above.

7. Claims 8, 16 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan et al (US Patent No. 6,405,316) in view of Rothrock et al (US Patent No. 7,181,603) and in view of Dutta et al (US Pub. No. 2002/0138727).

As per claim 8, the rejection of claim 1 is incorporated and Krishnan discloses the security agent and the object model [Fig. 1].

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Dutta teaches:

the loader instantiates the security agent (i.e. class public ServerClassM) separately from the object model (i.e. Class public ClientClassA or Class public ClientClassB) [Fig. 4A, paragraph 0047, 0048, 0050].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Dutta with Krishnan and Rothrock, since one would have been motivated to provide secure access control [Dutta, paragraph 0009 lines 4-5].

As per claim 16, the rejection of claim 10 is incorporated and it encompasses limitations that are similar to limitations of claim 8. Thus, it is rejected with the same rationale applied against claim 8 above.

As per claim 25, the rejection of claim 18 is incorporated and it encompasses limitations that are similar to limitations of claim 8. Thus, it is rejected with the same rationale applied against claim 8 above.

Response to Amendment

8. Applicant's submission for RCE filed on Aug. 17, 2007 has been entered. Applicant has amended claims 1, 10, 18, which necessitated new ground of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Drake (US 6006328) – Computer software authentication, protection and security system

Waite et al (US 5222134) – Secure system for activating personal computer software at remote locations

Kobata et al (US 2002/0077985) – Controlling and managing digital assets

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nirav Patel whose telephone number is 571-272-5936. The examiner can normally be reached on 8 am - 4:30 pm (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

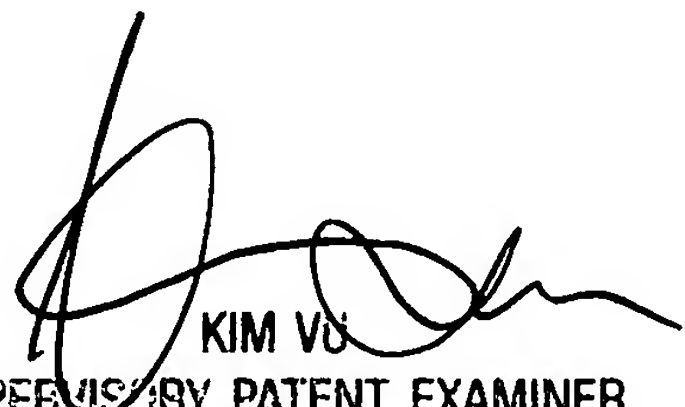
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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NBP

10/26/07



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